

83222-18

7/30/2014

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Ms. Jane Miller  
Agent for Direct AG Source, LLG  
C/O Biologic, Inc  
115 Obtuse Hill Road  
Brookfield, CT 06804

JUL 30 2014

Subject: Notification for label changes per PRN 98-10: Remove California restrictions on turf and ornamental uses  
Submission date: 7/10/2014  
Product Name: PPZ AG-EC Fungicide  
EPA Reg. No. 83222-18  
Decision Number 493225

Dear Registrant:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated 7/10/14 for the above product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action(s) requested fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

Note in the future, if you want to remove a restriction of a me-too product, you have to specify it, otherwise you will have to provide a documentation.

If you have questions concerning this letter, please call Banza Djapao at 703-305-7269, or via email at [djapao.banza@epa.gov](mailto:djapao.banza@epa.gov) or you may call me at 703-308-3194.

Sincerely,

A handwritten signature in black ink that reads "Shaja B. Joyner".

Shaja B. Joyner  
Product Manager 20  
Fungicide Branch  
Registration Division (7504P)

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United States Environmental Protection Agency Washington, DC 20460

Registration
Amendment
Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number: 83222-18
2. EPA Product Manager: S. Joyner
3. Proposed Classification: None, Restricted
4. Company/Product (Name): PPZ AG-EC Fungicide
5. Name and Address of Applicant: Direct AG Source, LLC
6. Expedited Review: EPA Reg. No., Product Name

Section - II

Amendment - Explain below.
Resubmission in response to Agency letter dated
Notification - Explain below.
Final printed labels in response to Agency letter dated
Me Too Application.
Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)
This is a notification to delete the state specific restriction for the use of the product on turf and ornamentals in California per PR Notice 98-10.

Section - III

1. Material This Product Will Be Packaged In: Child-Resistant Packaging, Unit Packaging, Water Soluble Packaging, 2. Type of Container: Metal, Plastic, Glass, Paper, Other.
3. Location of Net Contents Information: Label, Container
4. Size(s) Retail Container
5. Location of Label Directions: on label
6. Manner in Which Label is Affixed to Product: Lithograph, Paper glued, Stenciled, Other

Section - IV

1. Contact Point: Name: Jane M. Miller, Title: Agent, Telephone No.: (203) 740-1200
Certification: I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete.
2. Signature: [Handwritten Signature]
3. Title: Agent
4. Typed Name: Jane M. Miller
5. Date: July 10, 2014
6. Date Application Received (Stamped)

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**BIOLOGIC CONSULTING, INC.**  
*agribusiness professionals*

7/14

July 10, 2014

Document Processing Desk (NOTIF)  
Office of Pesticide Programs (7504P)  
US Environmental Protection Agency  
One Potomac Yard, 2777 S. Crystal Drive  
Arlington, VA 22202-4501

Attention: Ms. Shaja Joyner (PM #20)

Re: "PPZ AG-EC Fungicide"; EPA Reg. No. 83222-18  
Notification to Delete State Specific Restriction

Dear Ms. Joyner:

On behalf of Direct AG Source, LLC please find enclosed an Application for Pesticide Notification for the above-mentioned product. This notification is to delete the state specific restriction on page 1 - **"Not for turf and ornamental use in California"**. There is no other change to the product label.

This action fits the definition of a Notification and:

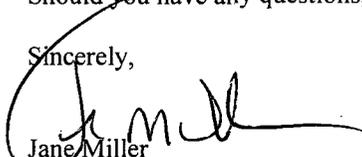
"This notification is consistent with the provisions of PR Notice 98-10 and the EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA."

The following documents are enclosed to process this Notification:

1. Application for Pesticide Notification (EPA Form 8570-1)
2. One (1) marked copy of the proposed label, marked to show the sentence to be deleted.
3. One (1) clean copy of the proposed label.
4. One (1) Pdf copy of clean labeling.

Should you have any questions, or wish to reach me, please feel free to contact our office at 203-740-1200.

Sincerely,



Jane Miller

Agent to Direct AG Source, LLC

cc: [illegible]

# PPZ AG-EC Fungicide

[Fungicide]

For control of certain diseases in [almonds], [bananas], [beets (garden)], [berries], [carrot], [celery and leafy petioles], [cereals], [cilantro], [citrus (non-bearing)], [corn (field, seed, popcorn, sweet)], [cranberry], [filbert], [mint], [onions and bulb vegetables], [parsley], [peanut], [pecan], [pineapple], [pistachios], [plantains], [rice (including wild rice)], [sorghum], [soybeans], [strawberries], [stone fruits], [sugarbeets], [sugarcane], [tree nuts], [turfgrass grown for seed], [turfgrass and ornamentals].

**ACTIVE INGREDIENT:**

Propiconazole: 1-[[2-(2, 4-dichlorophenyl)-4-propyl-1, 3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole.....41.8%

**OTHER INGREDIENTS:**.....58.2%

**TOTAL:**.....100.0%

Contains petroleum distillates.

Contains 3.6 pounds active ingredient per gallon.

## KEEP OUT OF REACH OF CHILDREN

## WARNING AVISO

Si usted no entiende la etiqueta, busque a alguien pare que se la explique a usted en detalle.  
(If you do not understand this label, find someone to explain it to you in detail).

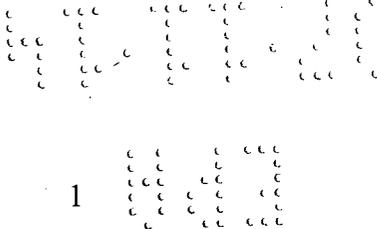
FIRST AID	
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>Call poison control center or doctor immediately for treatment advice.</li> <li>Do not give any liquid to the person.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this product, contact the National Pesticide Information Center, 1-800-858-7378, Monday-Friday, 7:30 AM-3:30 PM PST. You may also contact the National Poison Control Center, 1-800-222-1222, day or night, for emergency medical treatment	
<b>NOTE TO PHYSICIAN</b>	
There is no specific antidote for this product. Induce emesis or lavage stomach, taking care to avoid aspiration of stomach contents into lungs. Give saline laxative and supportive therapy. Contains petroleum distillate. Vomiting may cause aspiration pneumonia.	

See inside label booklet for additional Precautionary Statements.

EPA Reg. No.83222-18

EPA Est. No. XXXXX-XX-XXX

Manufactured for:  
Direct AG Source, LLC  
30473 260<sup>th</sup> Street  
Eldora, IA 50627



**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**WARNING**

Causes substantial but temporary eye injury. Causes skin irritation. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category G on the EPA chemical-resistance category selection chart.

**Applicators and all other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or viton,
- Shoes plus socks, and
- Protective eyewear

**USER SAFETY REQUIREMENTS**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

**ENGINEERING CONTROLS STATEMENT**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**USER SAFETY RECOMMENDATIONS**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside, then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and shrimp. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate.

**PHYSICAL OR CHEMICAL HAZARDS**

Combustible. Do not use or store near heat or open flame.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard; 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard;

**Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.**

**Exception:** If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves such as barrier laminate or viton,
- Shoes plus socks, and
- Protective eyewear

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for Agricultural Pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

**Entry Restrictions for Non-WPS Uses: Do not enter into treated areas until sprays have dried.**

## CROPS

### PRODUCT INFORMATION

PPZ AG-EC Fungicide is a broad spectrum fungicide for the control of specified diseases in almonds, berries, carrots, celery, cereals (wheat, barley, rye, oats, and rice), citrus (non-bearing), corn, cranberries, filberts, mint, onions and other bulb vegetables, sorghum, stone fruit (apricots, nectarines, peaches, plums, and prunes), peanuts, pecans, pineapple, sugarcane, tree nuts, turf grown for seed, and turfgrass and ornamentals.

Failure to follow directions and precautions on this label may result in crop injury, poor disease control, or illegal residues.

### USE PRECAUTIONS

Important: Do not use this product in greenhouses or as a tree injection.

#### Rotational Crops

To avoid possible illegal residues, do not plant any other crop intended for food, grazing, or any component of animal feed or bedding within 105 days of an application of PPZ AG-EC Fungicide to the preceding crop unless the second crop appears on this label. Alfalfa can be planted 75 days after the last application of PPZ AG-EC Fungicide if the total application of propiconazole has not exceeded 0.22 pound active ingredient per acre during the previous year.

#### Integrated Pest Management

PPZ AG-EC Fungicide should be integrated into an overall disease and pest management (IPM) strategy whenever the use of fungicide is required. Cultural practices known to reduce disease

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development should be followed. Consult your local agricultural authorities for additional IPM strategies established for your area. PPZ AG-EC Fungicide may be used in state agricultural extension advisory (disease forecasting) programs using the recommend application timing based upon environmental factors favorable for disease development.

**Fungicide Resistance Management**

PPZ AG-EC Fungicide belongs to the sterol demethylation (DM1) class of fungicides and is classified as Group 3 Fungicide. Since certain fungi can develop resistance to this class of products, the use of PPZ AG-EC Fungicide should be part of a resistance management strategy that includes alternation and/or tank mixing with another fungicide mode of action. Because resistance development cannot be predicted, use of this product should conform to resistance management strategies established for the crop and use area. Rotate to a product that is effective on the target pathogen and has a mode of action different from PPZ AG-EC Fungicide. Apply the alternate products within the intervals specified on the label for PPZ AG-EC Fungicide. Do not apply PPZ AG-EC Fungicide at rates below those specified on the label. If tank mixing, use the full label rate of PPZ AG-EC Fungicide with the full label rates of other products effective on the target pest. Consult your local or state agricultural authorities for resistance management strategies that are appropriate for your disease management program. PPZ AG-EC Fungicide should not be alternated or tank mixed with any fungicide to which resistance has already developed.

**MIXING INSTRUCTIONS**

**Application Rate Reference Table**

Application Rate of PPZ AG-EC Fungicide (fl. oz./A)	Active Ingredient Equivalent (lb. a.i./A)	Acres/Gal of PPZ AG-EC Fungicide)
2.0	0.056	64
4.0	0.1125	32
6.0	0.169	21.3
8.0	0.225	16
10.0	0.28	12.8
12.0	0.34	10.7
16.0	0.45	8
20.0	0.56	6.4
24.0	0.67	5.3
30.0	0.84	4.3
32.0	0.90	4

Prepare no more spray mixture than is required for the immediate operation. Thoroughly clean spray equipment before using this product. Agitate the spray solution before and during application. Rinse spray tank thoroughly with clean water after each day's use and dispose of pesticide rinsate by application to an already treated area.

**PPZ AG-EC Fungicide - Alone:** Add 1/2-2/3 of the required amount of water to the spray or mixing tank. With the agitator running, add the PPZ AG-EC Fungicide to the tank. Continue agitation while adding the remainder of the water. Begin application of the spray solution after the

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PPZ AG-EC Fungicide has completely dispersed into the mix water. Maintain agitation until all of the mixture has been sprayed.

**PPZ AG-EC Fungicide - Tank Mixtures:** PPZ AG-EC Fungicide is usually compatible with all tank mix partners listed on this label. To determine the physical compatibility of PPZ AG-EC Fungicide with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

Add 1/2-2/3 of the required amount of water to the spray or mixing tank. With the agitator running, add the tank mix partner into the tank. Allow the material to completely dissolve and disperse into the mix water. Continue agitation while adding the remainder of the water and PPZ AG-EC Fungicide to the spray tank. Allow the PPZ AG-EC Fungicide to completely disperse. Spray the mixture with the agitator running.

Do not apply this product in a mix with a dodine fungicide for any uses on this label (except almonds), or crop injury will occur.

If using PPZ AG-EC Fungicide in a tank mix, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations required by the label of the tank mix product. No label dosage rate should be exceeded, and the most restrictive label precautions and limitations should be followed. Do not tank mix this product with any product that prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are registered.

### APPLICATION INSTRUCTIONS

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall. Avoid applying PPZ AG-EC Fungicide under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur. Do not apply in a manner which results in exposure to humans or animals.

**Ground Application:** For tree crops, apply PPZ AG-EC Fungicide in a minimum of 50 gals. of water per acre unless otherwise specified. For all other crops, apply PPZ AG-EC Fungicide in a minimum of 10 gals. of water per acre unless otherwise specified.

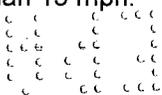
**Aerial Application:** For tree crops, apply PPZ AG-EC Fungicide in a minimum of 10 gals. of water per acre unless otherwise specified. For all other crops, apply PPZ AG-EC Fungicide in a minimum of 2 gallons of water per acre unless otherwise specified.

**Chemigation Application:** Apply PPZ AG-EC Fungicide through properly equipped chemigation systems for disease control in the labeled crops. Refer to crop specific use directions for application rates, timing and frequency of application. Do not apply PPZ AG-EC Fungicide by chemigation to other labeled crops except as specified in Direct AG Source, LLC supplemental labeling or product bulletins. When applying this product by chemigation, do not exceed labeled rates or apply more frequently than recommended for conventional application methods. PPZ AG-EC Fungicide, alone or in combination with other pesticides that are registered for application through irrigation systems, may be applied through irrigation systems. For chemigation application to labeled crops, apply in 0.1 to 0.25 inches of water unless otherwise specified. Chemigation with excessive water may lead to a decrease in efficacy.

### SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

**Wind Speed:** Do not apply at wind speeds greater than 15 mph.



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**Droplet size:** Apply as a medium or coarser spray (ASAE Standard 572)

**Temperature Inversions:** If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

**Other State and Local Requirements:** Applicators must follow all state and local pesticide drift requirements regarding application of propiconazole. Where states have more stringent regulations, they must be observed.

**Equipment:** All application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

**Aerial Application:**

1. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
2. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
3. When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

**Groundboom Application:**

1. Do not apply with a nozzle height greater than 4 feet above the crop canopy.

**SPRAY EQUIPMENT**

Thorough coverage is necessary to provide good disease control.

Avoid spray overlap as crop injury may occur.

Air-assisted or air-blast sprayers use a forced air stream to move spray droplets into the canopy. Set up the fan to deliver only enough air volume to penetrate the canopy and provide good coverage. Adjust deflectors or other aiming devices to direct spray only to the target area.

Equip sprayers with nozzles that provide accurate and uniform application. Be certain that nozzles are the same size and uniformly spaced across the boom. Calibrate sprayer before use.

Use a pump with sufficient capacity to maintain 35-40 psi at nozzles and provide sufficient agitation in tank to keep mixture in suspension. (this requires recirculation of 10% of tank volume per minute). Use a jet agitator, or liquid sparger tube for agitation. Do not use air sparging.

Although PPZ AG-EC Fungicide is an emulsifiable concentrate, it is suggested that screens be used to protect the pump and to prevent nozzles from clogging. Screens placed on suction side of pump should be 16-mesh or coarser. Do not place a screen in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Check nozzle manufacturer's recommendations.

For more information on spray equipment and calibration, consult sprayer manufacturers and state recommendations. For specific local directions and spray schedules, consult the current state agricultural experiment station recommendations.

**CHEMIGATION INSTRUCTIONS**

**Precautions:**

- Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. Do not apply this product through any other type of irrigation system.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from

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non-uniform distribution of treated water.

- If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers, or other experts.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ), backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank or at least twice the inside diameter of the fill pipe.

**Note:** Do not inject PPZ AG-EC Fungicide at full strength or deterioration of valves and seals may occur. Use a dilution ratio of at least 10 parts water to 1 part PPZ AG-EC Fungicide. PPZ AG-EC Fungicide is corrosive to many seal materials. Leather seals are best. EPDM or silicone rubber seals can be used but should be replaced once a year. Do not use Viton, Buna-N, Neoprene, or PVC seals.

**Specific Equipment Requirements**

- The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

**Center Pivot Irrigation Equipment**

- Use only with drive systems which provide uniform water distribution.
- Do not use end-guns when applying PPZ AG-EC Fungicide through center pivot systems because of non-uniform application.
- Determine the size of the area to be treated.
- Determine the time required to apply 1/8-1/2 inch of water over the area to be treated

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when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. When applying PPZ AG-EC Fungicide through irrigation equipment, use the lowest obtainable water volume while maintaining uniform distribution. Run the system at 80-95% of the manufacturer's rated capacity.

- Using only water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of PPZ AG-EC Fungicide required to treat the area covered by the irrigation system.
- Add the required amount of PPZ AG-EC Fungicide and sufficient water to meet the injection time requirements of the solution tank.
- Make sure the system is fully charged with water before starting injection of the PPZ AG-EC Fungicide solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- Maintain constant solution tank agitation during the injection period.
- Stop injection equipment after treatment is completed. Continue to operate the system until the PPZ AG-EC Fungicide solution has cleared the sprinkler head.

**Solid Set, Hand Move, and Moving Wheel Irrigation Equipment**

- Determine the acreage covered by the sprinkler.
- Fill injector solution tank with water and adjust flow rate to use the contents over a 20- to 30- minute interval. When applying PPZ AG-EC Fungicide through irrigation equipment, use the lowest obtainable water volume while maintaining uniform distribution.
- Determine the amount of PPZ AG-EC Fungicide required to treat the area covered by the irrigation system.
- Add the required amount of PPZ AG-EC Fungicide into the same quantity of water used to calibrate the injection period.
- Maintain constant solution tank agitation during the injection period.
- Operate the system at normal pressures recommended by the manufacturer of the injection equipment and used for the time interval established during the calibration.
- Inject PPZ AG-EC Fungicide at the end of the irrigation cycle or as a separate application to maximize foliar fungicide retention.
- Stop injection equipment after treatment is completed. Continue to operate the system until the PPZ AG-EC Fungicide solution has cleared the last sprinkler head.

**CROP SPECIFIC INSTRUCTIONS**

**ALMONDS**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 32 fl. oz. per acre per season.
- Do not apply more than 0.90 lb. ai propiconazole containing product per acre per season.
- Days between last application and harvest (PHI): 60 days.
- Do not graze livestock in treated areas or cut treated cover crop for feed.

PPZ AG-EC Fungicide may be applied by either ground or air application in a minimum of 15 gals. per acre in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

For use on almonds only, PPZ AG-EC Fungicide may be tank mixed with a dodine fungicide (such as Syllit).



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TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Brown Rot Blossom Blight ( <i>Monilinia laxa</i> , <i>M. fructicola</i> )	4-8 fl. oz.	Apply PPZ AG-EC Fungicide in at least 15 gallons of spray per acre at 5-10% bloom and 50-100% bloom. Under severe disease conditions, use the highest rate. Minimum retreatment interval is 7 days.
Anthracnose ( <i>Collectotrichum acutatum</i> )	8 fl. oz.	Apply PPZ AG-EC Fungicide at bud break on a 7-14 day interval.

**BANANAS AND PLANTAINS**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 24 fl. oz. during each growing season (this includes any preharvest sprays).
- Do not apply more than 0.67 lb. ai propiconazole containing product per acre per season.
- Do not apply PPZ AG-EC Fungicide within 100 yards of non-bagged bananas.
- Do not apply PPZ AG-EC Fungicide on bananas unless they are protected by polyethylene bags.
- Do not apply PPZ AG-EC Fungicide on plantains if the fruit present are not protected by polyethylene bags.
- Do not feed whole bananas and plantains to animals.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Black Sigatoka ( <i>Mycosphaerella fijiensis</i> )	3 fl. oz.	Make applications before disease symptoms appear at the onset of the rainy season. Apply specified rate of PPZ AG-EC Fungicide in 10 to 20 gallons of water per acre. Make no more than 2 consecutive applications on a 21 to 25 day schedule before rotating to another labeled product with a different mode of action for at least 2 sprays. A maximum of 8 applications can be made. If possible, it is recommended to have at least 2 consecutive months "triazole free" during the period of lower disease pressure. <b>Mixing Procedures</b> <b>Oil-in-Water Emulsion:</b> Add the crop oil to the spray tank. Add the emulsifier (0.6 fl. oz. per gal. of oil) and PPZ AG-EC Fungicide to the spray tank and mix thoroughly for 5 minutes. Add water to the spray tank and mix thoroughly for 15 minutes. <b>Oil Alone:</b> Add crop oil to the spray tank. Add the PPZ AG-EC Fungicide to the spray tank and mix thoroughly for 5 minutes. Maintain agitation.

**BEETS, GARDEN**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 16 fl. oz. per acre per season.
- Days between last application and harvest (PHI): 14 days
- Do not apply more than 0.45 lb. ai propiconazole containing product per acre per season.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall. Apply by ground, air or chemigation in sufficient volume to provide thorough coverage.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Leaf Spot (Cercospora beticola) Powdery Mildew (Erysiphe polygoni)	3-4 fl. oz.	Begin application at first sign of disease. Make no more than 2 consecutive applications before rotating to another registered fungicide with a different mode of action. If disease levels continue to increase, immediately switch to a fungicide with a different mode of action. Minimum retreatment interval is 14 days.

**BERRIES**

**(Bushberries and Caneberries and cultivars and/or hybrids of these)**

**Bushberries:** blueberry (highbush & lowbush), cranberry (highbush) currant (black & red), elderberry, gooseberry, lingonberry, native currant

**Additional Bushberries:** aronia berry, buffalo currant, chilean guava, european barberry, edible honeysuckle, huckleberry, kostaberry, juneberry (Saskatoon berry), salal, sea buckthorn

**Caneberries:** blackberry, loganberry, red and black raspberry, wild raspberry

**Additional Caneberries:** bingleberry, boysenberry, dewberry, lowberry, marionberry, Olallieberry, youngberry

Low Growing Berries (see Strawberry section)

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 30 fl. oz. per acre per season.
- Do not apply more than 0.84 lb. ai propiconazole containing product per acre per season.
- Days between last application and harvest (PHI): 30 days.

PPZ AG-EC Fungicide may be applied by either ground application in a minimum of 5 gals. per acre or air application in a minimum of 15 gals. per acre in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Mummyberry Disease ( <i>Monilinia vaccinicorymbosi</i> )	6 fl. oz.	Make first application of PPZ AG-EC Fungicide beginning at green tip and repeat in 7 to 10 days. If conditions are favorable for disease development, additional applications may need to be made at pink bud and repeated every 7 to 10 days through petal fall.
Leaf spot and Stem canker ( <i>Septoria albopucate</i> ) Rust ( <i>Pucciniastrum vaccinii</i> )	6 fl. oz.	Apply when conditions favor disease development. Repeat applications on a 4 week spray interval.
Leaf and Cane Spot ( <i>Septoria rubi</i> )	6 fl. oz.	Apply as a delayed dormant spray after training in the spring. Repeat this application in the late spring, again at bud break, and again once flowering has begun.
Powdery Mildew ( <i>Microsphaera vaccinii</i> )	6 fl. oz.	Apply PPZ AG-EC Fungicide at 5-10% bloom. Repeat this application at full bloom and on a 14 day interval while conditions are favorable for disease development.
Leaf Spot ( <i>Septoria spp.</i> )	6 fl. oz.	Make first application any time prior to bloom and again after petal fall. If needed, repeat application just after harvest.

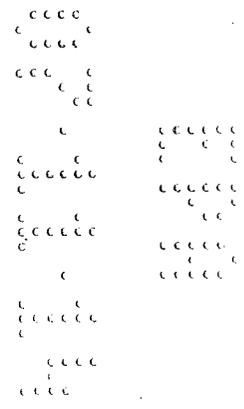
**CARROTS**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 16 fl. oz. per acre per season.
- Do not apply more than 0.45 lb. ai propiconazole containing product per acre per season.
- Days between last application and harvest (PHI): 14 days.

PPZ AG-EC Fungicide may be applied by either ground application in a minimum of 15 gals. per acre or air application in a minimum of 5 gals. per acre, or chemigation in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.



TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Leaf Blights ( <i>Cercospora carotae</i> ) (suppression of <i>Alternaria dauci</i> )	4 fl. oz.	Apply 4 oz. of PPZ AG-EC Fungicide when conditions favor disease development. Continue applications on a 7- to 10- day interval using the shorter interval when disease conditions are severe. If desired, a spreader-sticker may be used.
Powdery Mildew ( <i>Erysiphe polygoni</i> )	2 fl. oz. plus chlorothalonil	Apply 2 oz. of PPZ AG-EC Fungicide with 0.75 lb. ai of Chlorothalonil per acre. Begin applications when conditions favor disease development. Continue applications on a 7- to 10- day interval.

**CELERY AND LEAF PETIOLES SUBGROUP**

Celery, Chinese celery, cardoon, celtuce, fennel, Florence, rhubarb, Swiss chard

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 16 fl. oz. per acre per season.
- Days between last application and harvest (PHI): 14 days.
- Do not apply more than 0.45 lb. ai propiconazole containing product per acre per season.

PPZ AG-EC Fungicide may be applied by either ground application in a minimum of 10 gals. per acre or air application in a minimum of 5 gals. per acre in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

Target Diseases	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Early Blight ( <i>Cercospora apii</i> ) Late Blight ( <i>Septoria apicola</i> )	4 fl. oz.	Apply PPZ AG-EC Fungicide on a 7- day schedule either by ground or air. If desired, PPZ AG-EC Fungicide may be tank mixed with an appropriate spreader-sticker.

**CEREALS**

Wheat

(also see next section for Barley, Rye, Triticale, Oats)

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 8 fl. oz. per acre per season.
- Maximum amount of PPZ AG-EC Fungicide: 4 fl. oz. per acre per season if forage or hay will be harvested.
- Do not apply after Feekes growth stage 10.54.
- Days between last application and harvest (PHI): 7 days for forage or hay,
- Do not apply more than 0.22 lb. ai propiconazole containing product per acre per season.

PPZ AG-EC Fungicide may be applied by ground, air, or chemigation in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

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TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
<b>Early Season Suppression of:</b> Glume blotch ( <i>Stagonospora nordorum</i> ) Leaf blight ( <i>Septoria tritici</i> ) Powdery mildew ( <i>Blumeria</i> spp., <i>Erysiphe</i> spp.) Tan spot ( <i>Pyrenophora tritici-repentis</i> )	2-4 fl. oz.	Apply PPZ AG-EC Fungicide in the spring. Make a second application up to Feekes growth stage 10.5 for season long control. Applications may be made no closer than a 14 day interval.
<b>Control of leaf diseases:</b> Glume blotch ( <i>Stagonospora nordorum</i> ) Helminthosporium leaf blight ( <i>Drechslera tritici-repentis</i> ) Leaf blight ( <i>Septoria tritici</i> ) Net blotch ( <i>Pyrenophora teres</i> ) Powdery mildew ( <i>Blumeria</i> spp., <i>Erysiphe</i> spp.) Rusts ( <i>Puccinia</i> spp.) Spot blotch ( <i>Bipolaris sorokiniana</i> ) Tan spot ( <i>Pyrenophora tritici-repentis</i> )	4 fl. oz.	Protecting the flag leaf is important for maximizing the potential yield. When PPZ AG-EC Fungicide is applied at 50% to fully emerged plants, the highest yields are normally obtained. Applications may be made no closer than at 14 day intervals. The use of an oil based adjuvant may improve spray coverage and canopy penetration.  PPZ AG-EC Fungicide can be applied at full head emergence (Feekes growth stage 10.5). Do not apply after this stage to avoid possible illegal residues.
Foot rot ( <i>Pseudocercospora</i> spp.)	4 fl. oz.	Apply PPZ AG-EC Fungicide plus half rates of other EPA-registered fungicides such as thiophanate-methyl. Apply at tillering but before elongation has occurred.
Fusarium head blight Suppression	4 fl. oz.	Apply PPZ AG-EC Fungicide at approximately 50% flowering. Addition of a penetrating type of adjuvant may increase Fusarium head blight suppression

**CEREALS**

Barley, Rye, Triticale, Oats

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 8 fl. oz. per acre per season.
- Maximum amount of PPZ AG-EC Fungicide: 4 fl. oz. per acre per season if forage or hay will be harvested.
- Days between last application and harvest (PHI): 7 days for forage or hay,
- Do not apply more than 0.22 lb. ai propiconazole containing product per acre per season.
- Do not apply after Feekes 10.54

PPZ AG-EC Fungicide may be applied by ground, air, or chemigation in sufficient volume to provide thorough coverage.  
 PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
<b>Early Season Suppression of:</b> Glume blotch <i>(Stagonospora nordorum)</i> Leaf blight <i>(Septoria tritici)</i> Powdery mildew <i>(Blumeria spp., Erysiphe spp.)</i> Tan spot <i>(Pyrenophora tritici-repentis)</i>	2-4 fl. oz.	Apply PPZ AG-EC Fungicide in the spring. Make a second application up to Feekes growth stage 10.5 for season long control. Applications may be made no closer than a 14 day interval.
<b>Control of leaf diseases:</b> Barley scald <i>(Rhynchosporium Secalis)</i> Barley stripe <i>(Pyrenophora graminea)</i> Glume blotch <i>(Stagonospora nordorum)</i> Helminthosporium leaf blight <i>(Drechslera tritici-repentis)</i> Leaf blight <i>(Septoria tritici)</i> Net blotch <i>(Pyrenophora teres)</i> Powdery mildew <i>(Blumeria spp., Erysiphe spp.)</i> Rusts <i>(Puccinia spp.)</i> Spot blotch <i>(Bipolaris sorokiniana)</i> Tan spot <i>(Pyrenophora tritici-repentis)</i>	4 fl. oz.	Protecting the flag leaf is important for maximizing the potential yield. When PPZ AG-EC Fungicide is applied at 50% to fully emerged plants, the highest yields are normally obtained. Applications may be made no closer than at 14 day intervals. The use of an oil based adjuvant may improve spray coverage and canopy penetration.  PPZ AG-EC Fungicide can be applied up to 45 days prior to harvest.
Foot rot <i>(Pseudocercospora spp.)</i>	4 fl. oz.	Apply PPZ AG-EC Fungicide plus half rates of other EPA-registered fungicides such as thiophanate-methyl. Apply at tillering but before elongation has occurred.
Fusarium head blight Suppression	4 fl. oz.	Apply PPZ AG-EC Fungicide at approximately 50% flowering. Addition of a penetrating type of adjuvant may increase Fusarium head blight suppression

**CITRUS (Non-Bearing)**

Calamondin, citron, citrus hybrids, grapefruit, kumquat, lemon, lime, Mandarin orange (sour and sweet), pummelo, satsuma (mandarin), tangerine, including all cultivars and/or hybrids of these.

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 24 fl. oz. per acre per season.
- Do not apply to citrus that will bear harvestable fruit within 12 months.
- Do not apply more than 0.67 lb. ai propiconazole containing product per acre per season.

PPZ AG-EC Fungicide may be applied by either ground application or air application in a minimum of 15 gals. per acre in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Greasy spot ( <i>Mycosphaerella citri</i> )	6-8 fl. oz.	Begin applications in June. Apply at 30 day intervals through August.

**CORN**

**Field, Seed, Popcorn, Sweet Corn**

**Use Restrictions**

**Field Corn, Field Corn Grown for Seed, and Popcorn**

- Maximum amount of PPZ AG-EC Fungicide: 16 fl. oz. per acre per season.
- Maximum amount of PPZ AG-EC Fungicide: 8 fl. oz. on corn harvested for forage.
- Days between last application and harvest (PHI): 30 days for forage, grain, and stover.
- Do not apply more than 0.45 lb. ai propiconazole containing product per acre per season.

**Sweet Corn:**

- Days between last application and harvest (PHI): 14 days ears and forage.

PPZ AG-EC Fungicide may be applied by either ground, air, or chemigation in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Northern corn leaf blight ( <i>Setosphaeria turcica</i> ) Northern corn leaf spot ( <i>Cochliobolus carbonum</i> ) Southern corn leaf blight ( <i>Cochliobolus heterostrophus</i> )  also known as Helminthosporium leaf blights ( <i>H. maydis</i> , <i>H.turcicum</i> , and <i>H. carbonum</i> )	2-4 fl. oz.	Apply PPZ AG-EC Fungicide for leaf blights when disease first appears and continue on a 7- to 14- day schedule. Use the low rate when disease pressure is low. Under heavy disease pressure or when conditions favor disease, apply the high rate.



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TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Eastern Filbert Blight ( <i>Anisogramma anomala</i> )	5-8 fl. oz.	<p>Begin applications when green leaf tissue becomes visible and continue at 14- to 21- day intervals. Under severe disease conditions, use the higher rate and shorter interval.</p> <p><b>Note:</b> On certain varieties, PPZ AG-EC Fungicide applications may cause smaller and/or greener leaves. Yields of filberts displaying these characteristics have not been reduced due to PPZ AG-EC Fungicide treatments.</p>

**GRASSES GROWN FOR SEED (ID, MN, NE, OR, and WA Only)  
 Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 32 fl. oz. per acre per season
- Do not apply more than 0.90 lb. ai propiconazole containing product per acre per season.
- Do not feed hay cut within 20 days of the last application.
- Do not graze treated areas within 140 days of last application.

PPZ AG-EC Fungicide may be applied by ground or air application in a minimum of 10 gals. per acre, or by chemigation in sufficient volume to provide thorough coverage.  
 PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Rusts ( <i>Puccinia</i> spp.) Powdery mildew ( <i>Erysiphe graminis</i> ) Selenophoma stem Eyespot ( <i>Selenophoma</i> spp.) Ergot Stem Diseases	4-8 fl. oz.	<p>Apply PPZ AG-EC Fungicide when powdery mildew and <i>Selenophoma</i> infections and/or rust pustules are noticeable and increasing in number in late spring or early summer. Repeat at 14 to 21 day intervals. To maximize control under severe rust pressure, use the higher rate of 8 fl. oz. per acre and make applications at 14 day intervals until the seed is mature. Make the last application at least 20 days before seed matures. For bluegrass, it is important to begin applications early in the growing season.</p>

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**MINT (Peppermint, Spearmint)**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 12 fl. oz. per acre per season.
- Days between last application and harvest (PHI): 7 days.
- Do not apply more than 0.338 lb. ai propiconazole containing product per acre per season.

PPZ AG-EC Fungicide may be applied by ground in a minimum of 20 gals. per acre in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Rusts ( <i>Puccinia menthae</i> )	4 fl. oz.	Begin applications when plants are 2 to 4 inches high or when conditions become favorable for disease development.  Continue on a 14-day interval as conditions warrant.

**BULB VEGETABLES**

**BULB ONIONS: Garlic Bulb, Onions Bulb, Shallot Bulb**

(Cultivars, varieties, and/or hybrids of these. See additional crops listed below.)

**GREEN ONIONS**

**Leek, Fresh Onion, Green Onion, Fresh Shallot, Leaves**

Cultivars, varieties, and/or hybrids of these. See additional crops listed below.

**Additional Bulb Onions:** daylily, fritillaria, great-headed garlic, serpent garlic, lily, chinese onion, pearl onion, potato onion

**Additional Green Onions:** fresh chive leaves, fresh chinese chive leaves, hosta elegans, fritillaria leaves, kurrat, Lady's leek, wild leek, beltsville bunching onion, macrostem onion, tree tops onion, welsh onion tops

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 16 fl. oz. per acre per season.
- Days between last application and harvest (PHI): 14 days on bulb onion types; no re-entry interval for green onion types.
- Do not apply more than 0.45 lb. ai propiconazole containing product per acre per season.

PPZ AG-EC Fungicide may be applied by ground application in a minimum of 15 gals. per acre or air application in a minimum of 5 gals. per acre in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Purple Blotch ( <i>Alternaria porri</i> ) Suppression of Botrytis Leaf blight ( <i>Botrytis squamosa</i> )	4-8 fl. oz.	Begin applications when conditions favor disease development and continue on a 7- to 10- day interval. Use the higher rate and shorter interval when disease

		conditions are severe.
	2-4 fl. oz. plus tank mix partner	In tank mix, apply 2-4 oz. of PPZ AG-EC Fungicide in combination with another fungicide registered for control of botrytis leaf blight or purple blotch. Begin applications when conditions favor disease development and continue on a 7- day interval or according to the tank mix partner label. Use higher rates when disease conditions are severe. To achieve optimum control use a wetting agent or a spreader-sticker.

**PARSLEY, FRESH AND DRIED LEAVES  
 CILANTRO (CORIANDER), LEAVES**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 16 fl. oz. per acre per season.
- Days between last application and harvest (PHI): 14 days
- Do not apply more than 0.45 lb. ai propiconazole containing product per acre per season.

PPZ AG-EC Fungicide may be applied by ground, air, or chemigation in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Leaf Spot ( <i>Cercospora</i> spp.) Leaf Spot ( <i>Alternaria</i> spp.) Powdery Mildew ( <i>Erysiphe</i> spp.)	3-4 fl. oz.	Begin applications at first sign of disease and continue on a 14 day interval. Make no more than 2 consecutive applications before rotating to another registered fungicide with a different mode of action.  If disease levels continue to increase, immediately switch to a fungicide with different mode of action.

**PEANUTS**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 16 fl. oz. per acre per season.
- Days between last application and harvest (PHI): 14 days when using no more than 4 fl. oz. per acre: 21 days when using 8 fl. oz. per acre
- Do not feed hay from treated fields to livestock if the high rate is used (8.0 fl. oz. per acre)
- Do not apply more than 0.45 lb. ai propiconazole containing product per acre per season.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Early leaf spot ( <i>Cercospora arachidicola</i> ) Late leaf spot ( <i>Cercosporidium personatum</i> ) Rust ( <i>Puccinia arachidis</i> ) Web Blotch ( <i>Phoma arachidicola</i> )	2.5 - 4 fl. oz.  4 fl. oz.  4 fl. oz.  4 fl. oz.	<p>Apply PPZ AG-EC Fungicide beginning 35 to 40 days after planting or at the first appearance of disease, continue applications on a 10 to 14 day schedule. Under heavy disease pressure, use higher specified application rates. PPZ AG-EC Fungicide also may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.</p> <p>PPZ AG-EC Fungicide may be applied by ground, air or chemigation.</p> <p>Apply PPZ AG-EC Fungicide according to one of the following schedules:</p> <p>A. Apply 4 fl. oz. of PPZ AG-EC Fungicide per acre to the crown and pegging zones of the plant using chemigation or directed ground application. Begin applications 45 days after planting or at the first appearance of disease, and repeat on a 14- day schedule.</p> <p>B. Apply 8 fl. oz. of PPZ AG-EC Fungicide per acre to the crown and pegging zones of the plant using chemigation or directed ground application. Make 2 applications, the first at pegging (approximately 60 days after planting) or at the first appearance of disease, and the second application 3 to 4 weeks later.</p> <p>Irrigation: When applying PPZ AG-EC Fungicide in irrigation water for Southern Stem Rot Control, use a minimum of 0.25 to 0.5 inches of irrigation water per acre. Use enough water so that the fungicide penetrates the peanut canopy and reaches the crown of the plant where Southern Stem Rot is most active.</p> <p>When using PPZ AG-EC Fungicide via irrigation or directed ground application, additional methods should be used for leaf spot control.</p>
Southern Stem Rot ( <i>Sclerotium rolfsii</i> )		

**PECANS**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 32 fl. oz. per acre per season.
- Do not apply more than 0.90 lb. ai propiconazole containing product per acre per season.
- Do not apply after shuck split.
- Do not graze livestock in treated areas or cut treated cover crop for feed.

PPZ AG-EC Fungicide may be applied by ground or air application in a minimum of 20 gals. per acre in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

Propiconazole may have effects on federally listed threatened and endangered species or critical habitat in some counties. When using this product, you must follow the measures contained in the County Bulletin for the county in which you are making the pesticide application. To determine whether your county has a bulletin, consult <http://www.epa.gov/espp/bulletins.htm>. Bulletins may also be available from local pesticide dealers, extension offices, or state pesticide agencies.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Downy Spot ( <i>Mycosphaerella caryigena</i> ) Liver Spot ( <i>Gnomonia caryae</i> pv <i>pecanae</i> ) Pecan Scab ( <i>Cladosporium caryigenum</i> ) Powdery Mildew ( <i>Microsphaera penicillata</i> ) Vein Spot ( <i>Gnomonia nerviseda</i> ) Zonate Leaf Spot ( <i>Cristulariella moricola</i> )	4-8 fl. oz.	<b>Pecan scab:</b> Apply 4-8 fl. oz. per acre on a 14 day schedule during bud break and pre-pollination sprays. Apply 6-8 fl. oz. per acre during nut formation and cover sprays. Use higher rates when disease pressure is heavier. <b>Other listed foliar diseases:</b> Apply 4 fl. oz. per acre with other registered pecan products labeled for these mid to late season foliar diseases. Observe all directions, precautions and limitations for the other products.

**PINEAPPLE (HAWAII ONLY)**

**Use Restrictions**

- Do not use treated crowns for food or feed.
- Do not graze while plant is growing.
- Do not graze tops until fruit is harvested.
- Dispose of used dip solution according to local state and federal regulations.

Target Diseases	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Butt rot ( <i>Ceratocystis paradoxa</i> )	0.75 fl. oz. per 100 gals. of water (1:17,000)	Treatments may be made in either a cold or hot water dip. <b>Cold Water Dip:</b> Immerse crowns to give thorough wetting, remove, and allow to drain. <b>Hot Water Dip:</b> Maintain water temperature at 125°F (52°C). Soak crowns for 20 to 30 minutes, remove, and allow to drain.

**PISTACHIOS**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 32 fl. oz. per acre per season
- Do not apply more than 0.90 lb. ai propiconazole containing product per acre per season.
- Days between last application and harvest: 60 days
- Do not graze livestock in treated areas or cut treated cover crop for feed.

PPZ AG-EC Fungicide may be applied by ground or air application in a minimum of 15 gals. per acre in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Botryosphaeria Panicle and Shoot Blight ( <i>Botryosphaeria dothidea</i> )	5-8 fl. oz.	<p>Begin applications when green leaf tissue becomes visible and continue on a 14 to 21 day interval. Under severe disease conditions, use the higher rate and the shorter interval.</p> <p>NOTE: Under certain conditions PPZ AG-EC Fungicide applications may cause smaller and/or greener leaves. Yields of pistachios displaying these characteristics have not been reduced due to PPZ AG-EC Fungicide treatments.</p>

**RICE**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 12 fl. oz. per acre per season
- Days between last application and harvest (PHI): 35 days
- Do not apply more than 0.34 lb. ai propiconazole containing product per acre per season.
- Do not apply to stubble or ratoon crop rice.
- Do not use in rice fields where commercial farming of crayfish will be practiced.
- Do not drain water from treated rice fields into ponds used for commercial fish farming.
- Do not use water drained from treated fields to irrigate other crops.
- Do not release flood water within 7 days of an application.

PPZ AG-EC Fungicide must be applied by air only in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

Propiconazole may have effects on federally listed threatened and endangered species or critical habitat in some counties. When using this product, you must follow the measures contained in the County Bulletin for the county in which you are making the pesticide application. To determine whether your county has a bulletin, consult <http://www.epa.gov/espp/bulletins.htm>. Bulletins may also be available from local pesticide dealers, extension offices, or state pesticide agencies.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
<p>Aggregate sheath spot (<i>Rhizoctonia oryzae-sativa</i>)            Black sheath rot (<i>Gaeumannomyces graminis</i>)            Brown leaf spot (<i>Helminthosporium oryzae</i>)            Kernal smut (<i>Tilletia barclayana</i>)            Leaf smut (<i>Entyloma oryzae</i>)            Narrow brown leaf spot (<i>Cercospora oryzae</i>)            Sheath blight (<i>Rhizoctonia solani</i>)            Sheath spot (<i>Rhizoctonia oryzae</i>)</p> <p>For disease suppression of:            False smut (<i>Ustilaginoidea Virens</i>)            Stem rot (<i>Sclerotium oryzae</i>)</p>	<p>6 to 10 fl. oz.</p>	<p>The timing of PPZ AG-EC Fungicide application will depend on disease severity, disease complex, and rice variety and growth stage. Consult local extension experts for local economic thresholds established for various rice varieties and diseases.</p> <p>Apply PPZ AG-EC Fungicide on either of the following schedules as an aerial spray in 5 to 10 gals. of water per acre:</p> <p>A. 6 fl. oz. per acre at first internode elongation (up to 2 - inch panicle) and repeat at swollen boot. Make the second application 14 days after the first application but before the boot splits and head emerges. PPZ AG-EC Fungicide provides best control of sheath blight when the first application is applied at disease appearance in the field. The first application is recommended when 5% or fewer of the tillers are infected.</p> <p>B. 10 fl. oz. per acre at first internode elongation (up to 2 - inch panicle). The 10 oz. rate is recommended if greater than 10% of the tillers are infected with sheath blight. If disease reappears, use another registered fungicide for the second application.</p> <p>Tank mix option: Apply 6 fl. oz. per acre of PPZ AG-EC Fungicide in a tank mix with registered fungicides for control of diseases of rice.</p>
<p><b>WILD RICE (MN only)</b>            Helminthosporium leaf blight (<i>Helminthosporium spp.</i>)            Brown Spot (<i>Bipolaris spp.</i>)</p>	<p>6-8 fl. oz.</p>	<p>Apply 6 fl. oz per acre of PPZ AG-EC Fungicide at both booting and heading, or make a single application of 8 fl. oz. per acre at booting.</p> <p>Minimum re-application interval is 10 days.</p>

**SORGHUM**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 16 fl. oz. per acre per season; 8 fl. oz. (0.22 lb. ai propiconazole) for sorghum harvested for forage.
- Days between last application and harvest (PHI): 30 days for forage; 21 days for grain and stover.
- Do not apply more than 0.45 lb. ai propiconazole containing product per acre per season.
- Do not graze livestock or cut for green chop or silage within 30 days of application.

PPZ AG-EC Fungicide may be applied by ground application in a minimum of 15 gals. per acre or air application in a minimum of 10 gals. per acre in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Ergot ( <i>Claviceps sorghi</i> )	3-4 fl. oz.	Make first application at or just prior to flowering. Repeat on a 5- to 7- day interval. Apply up to four times.

**SOYBEANS**

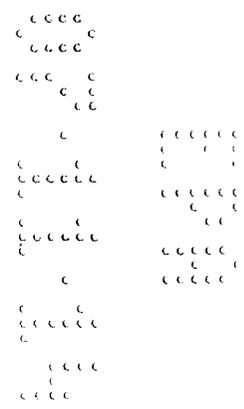
**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 12 fl. oz. per acre per season.
- Do not apply more than 0.34 lb. ai propiconazole containing product per acre per season.
- Applications may be made up to growth stage R6.

PPZ AG-EC Fungicide may be applied by ground or air application in sufficient volume to provide thorough coverage.

Addition of an oil-based additive is recommended for improved coverage and penetration when applying by air.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.



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TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Aerial Web Blight <i>(Rhizoctonia solani)</i> Anthracnose <i>(Colletotrichum truncatum)</i> Brown Spot <i>(Septoria glycines)</i> Frogeye Leaf Spot <i>(Cercospora sojina)</i> Soybean Rust <i>(Phakopsora pachyrhizi)</i>	4-6 fl. oz.	Apply 5-6 fl. oz. per acre at the first appearance of Aerial web blight and repeat the application 14 to 21 days later. Under severe disease conditions use the higher rate and shorter interval. For control of other foliar diseases, apply 6 fl. oz. per acre at growth stage R3 (early pod set when pods are 1/8 to 1/4 inch long) and 14 to 21 days later at growth stage R5 (pod fill). Apply 4-6 fl. oz. per acre at first indication that soybean rust is in the area. For best control, preventative applications work best. Repeat on a 14 to 21 day interval using the higher rate and shorter interval when disease is present in field and incidence is less than 2% (2 plants in 100 infected). If incidence is greater than this or if disease is in mid canopy, control will not be acceptable. Scouting for rust and/or being aware of the proximity of the disease via monitoring systems will aid in the proper timing to maximize the effectiveness of the fungicide applications. On certain varieties, PPZ AG-EC Fungicide applications may cause crinkled, smaller and/or greener leaves. Yields of dry beans displaying these characteristics have not been reduced due to PPZ AG-EC Fungicide treatments.

**STONE FRUIT: Apricots, cherries (sweet and tart), nectarines, peaches, plums, plumcot, prunes, and cultivars and/or hybrids of these.**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 20 fl. oz. per acre per season.
- Days between last application and harvest (PHI): 0 days.
- Do not apply more than 0.56 lb. ai propiconazole containing product per acre per season.

PPZ AG-EC Fungicide may be applied by ground or air application in a minimum of 15 gals. per acre in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall. For best control of stone fruit diseases, apply by ground application.

**Use Precautions**

- Applications of PPZ AG-EC Fungicide during bloom to Stanley plums have occasionally caused fruit to be less oval in shape and smaller in size at harvest. To avoid this, do not apply PPZ AG-EC Fungicide to Stanley plums earlier than 21 days before harvest.

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TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Brown Rot Blossom Blight ( <i>Monilinia</i> spp.)	4 fl. oz.	Apply PPZ AG-EC Fungicide at early bloom stage. If disease pressure is low, a second application may be made as needed up through petal fall. Make a second application if disease pressure is high or for susceptible varieties at 75-100% bloom and make a third application at petal fall.
Fruit Brown Rot ( <i>Monilinia</i> spp.)	4 fl. oz.	Apply as needed with a maximum of 2 sprays during the preharvest period up to the day of harvest. (0 day PHI) If high inoculum and severe disease conditions persist, apply another registered fungicide after the two PPZ AG-EC Fungicide applications.
Cherry Leaf spot ( <i>Blumeriella jaapii</i> ) Powdery Mildew ( <i>Podosphaera</i> spp.) Rust ( <i>Tranzschelia discolor</i> )	4 fl. oz.	Follow the brown rot blossom blight schedule. Make up to 2 additional applications on a 10 to 14 day interval from the end of petal fall to harvest.

**STRAWBERRIES**

(including low growing berries: bearberry, bilberry, cloudberry, muntries, partridgeberry)  
**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 16 fl. oz. per acre per season.
- Days between last application and harvest (PHI): 0 days.
- Do not apply more than 0.45 lb. ai propiconazole containing product per acre per season.

PPZ AG-EC Fungicide may be applied by ground application in a minimum of 20 gals. per acre or air application in a minimum of 15 gals. per acre in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Anthrachnose ( <i>Colletotrichum acutatum</i> ) Leaf Spot ( <i>Cercospora fragariae</i> ) Powdery Mildew ( <i>Sphaerotheca macularis</i> ) Leaf Rust ( <i>Phraomidium potentillae</i> )	4 fl. oz.	Begin applications when disease levels are no more than 5%. Apply 4 fl. oz. per acre of PPZ AG-EC Fungicide up to 4 times on a 7 day interval. Make no more than 2 consecutive applications before rotating to another registered fungicide with a different mode of action.

**SUGARBEETS**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 12 fl. oz. per acre per season
- Days between last application and harvest: 21 days
- Do not apply more than 0.34 lb. ai propiconazole containing product per acre per season.

PPZ AG-EC Fungicide may be applied by ground, air or chemigation in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Leaf Spot ( <i>Cercospora beticola</i> ) Powdery Mildew ( <i>Erysiphe polygoni</i> )	4 fl. oz.	Begin applications at first sign of disease and repeat at 10 to 14 day intervals. Make no more than 2 consecutive applications before rotating to another registered fungicide with a different mode of action. If disease levels continue to increase, immediately switch to a fungicide with a different mode of action.

**SUGARCANE**

**Use Restrictions**

- Do not use treated seed pieces for food or feed.
- Dispose of used dip solution according to local, state and federal regulations.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Pineapple disease ( <i>Ceratocystis paradoxa</i> )	0.75 fl. oz. per 100 gals. of water (1:17,000)	Apply PPZ AG-EC Fungicide to cut seed pieces. Treatments may be applied in one of the following methods: <b>Cold Water Dip:</b> Immerse seed pieces to give thorough wetting, remove, and allow to drain. <b>Hot Water Dip:</b> Maintain water temperature at 125°F (52°C). Soak the seed pieces for 20 to 30 minutes, remove, and allow to drain. <b>Conveyor Belt Treatment:</b> Treat seed pieces with PPZ AG-EC Fungicide/water solution using in-line directed spray sufficient to wet cut ends.

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**TREE NUTS:** almond (see specific directions in ALMOND Section), beechnut, brazil nut, butternut, cashew, chestnut, chinquapin, filbert (see specific directions in FILBERT-section), hickory, macadamia, pecan (see specific directions in PECAN section), walnut, Pistachios (see specific directions in PISTACHIO section)

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 32 fl. oz. per acre per season.
- Days between last application and harvest (PHI): 60 days, with the exception of pecans (see specific directions in PECAN section of this label).
- Do not apply more than 0.90 lb. ai propiconazole containing product per acre per season.
- Do not graze livestock in treated areas or cut treated cover crop for feed.

PPZ AG-EC Fungicide may be applied by ground or air application in a minimum of 15 gals. per acre in sufficient volume to provide thorough coverage.

PPZ AG-EC Fungicide is most effective when applied and allowed to dry before a rainfall.

For best control of tree nut diseases, apply by ground application.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Foliar Diseases	4-8 fl. oz.	Apply PPZ AG-EC Fungicide at first sign of disease. Repeat on a 7 to 14 day interval.

**POST HARVEST USE**

**PINEAPPLE**

**Use Restrictions**

- Maximum amount of PPZ AG-EC Fungicide: 4 fl. oz. as a post harvest treatment.

TARGET DISEASES	RATE OF PRODUCT PER ACRE	APPLICATION INSTRUCTIONS
Ceratocystis Butt rot ( <i>C. paradoxa</i> )	3-4 fl. oz./ 100 gal.	Apply 3 to 4 fl. oz. in 100 gal. of water or wax water emulsion after harvest. Fruit should be dipped or sprayed for thorough coverage and allowed to drain. Limit dipping time to no more than 3 minutes. Dip solution should be replaced with fresh dip solution after 200,000 lbs. of fruit have been treated. Fruit discarded from fresh fruit packing operations may be used for processing. Cannery wastes may be fed.

FL. OZ. PER ACRE OF PPZ AG-EC FUNGICIDE	LB. A.I. PER ACRE OF PPZ AG-EC FUNGICIDE	ACRES TREATED PER 1 GALLON OF PPZ AG-EC FUNGICIDE
2	0.056	64.0
4	0.1125	32.0
6	0.169	21.3
8	0.225	16.0
10	0.28	12.8
12	0.34	10.7
16	0.45	8.0
20	0.56	6.4
24	0.67	5.3
30	0.84	4.3
32	0.90	4.0

**TURFGRASS AND ORNAMENTAL USES**

**PRODUCT INFORMATION**

PPZ AG-EC Fungicide is a systemic fungicide for use on turfgrasses for the control of dollar spot (*Sclerotinia homeocarpa*), brown patch (*Rhizoctonia solani*), anthracnose (*Colletotrichum graminicola*), red thread (*Laetisaria fuciformis*), pink patch (*Limonomyces roseipellis*), rust (*Puccinia graminis*), powdery mildew (*Erysiphe graminis*), stripe smut (*Ustilago striiformis* and *Urocystis agropyri*), summer patch (*Magnaporthe poae*), necrotic ring spot (*Leptosphaeria korrae*), spring-dead spot (*Leptosphaeria korrae*, *Leptosphaeria narmari*, *Ophiosphaerella herpotricha*, *Gaeumannomyces graminis*), take-all patch (*Gaeumannomyces graminis*), leaf spot (*Bipolaris* spp., *Drechslera* spp.), gray leaf spot (*Pyricularia grisea*), pink snowmold (*Microdochium nivale*), fusarium patch (*Fusarium nivale*), gray snowmold (*Typhula* spp.), yellow patch (*Rhizoctonia cerealis*), and zoysia patch (*Rhizoctonia solani*).

PPZ AG-EC Fungicide also controls numerous diseases on ornamentals and other landscape and nursery plantings, including powdery mildews, rusts, leaf spots, scabs, and blights. Refer to the appropriate section for specified diseases and plants.

**Use Restrictions**

- Do not use PPZ AG-EC Fungicide as a tree injection treatment.
- Do not use PPZ AG-EC Fungicide in greenhouses.
- Do not apply more than 5.8 fluid ounces of PPZ AG-EC Fungicide per 1000 square feet per calendar year.
- Chemigation: Do not apply this product through any type of irrigation system.

**MIXING INSTRUCTIONS**

Fill the spray tank 1/2 – 3/4 full with water. Add the proper amount of PPZ AG-EC Fungicide and then add the rest of the water. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

If PPZ AG-EC Fungicide is tank mixed with other products, use the following sequence:

1. Always check the compatibility of the tank mix using a jar test with proportionate amounts of PPZ AG-EC Fungicide, other chemicals to be used, and the water, before mixing in the spray tank.
2. Provide sufficient jet or mechanical agitation during filling and application to keep the tank mix uniformly suspended.
3. Fill tank at least 1/2 full of clean water.
4. Add wettable powders to the tank first, allowing them to completely suspend in the tank

before proceeding. This process can be hastened by premixing the product in water before adding to the tank.

5. Add flowables or suspensions next.
6. Add PPZ AG-EC Fungicide next.
7. Add emulsifiable concentrates last.
8. Do not leave tank mix combinations in the spray tank for prolonged periods without agitation. Mix and apply them the same day.

**Tank Mixes**

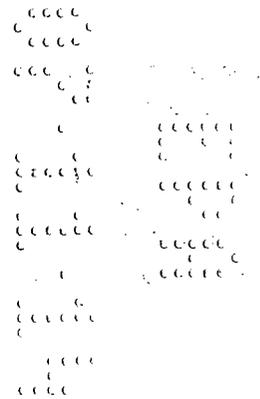
For broader spectrum control, PPZ AG-EC Fungicide can be tank mixed with other fungicides. For example, Subdue MAXX® may be tank mixed with PPZ AG-EC Fungicide or used alone when conditions are favorable for Pythium blight. PPZ AG-EC Fungicide is also compatible with numerous herbicides and insecticides. Check compatibility before tank mixing. Add Unite® (3 pints/100 gallons) to tank mixes which are incompatible. Follow the directions under **Mixing Instructions** for tank mixes. Observe all directions, precautions, and limitations on labeling of all products used in tank mixes. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the references products are registered.

**Turfgrass and Dichondra Disease Control**

- Use PPZ AG-EC Fungicide in a preventative disease control program.
- Apply in sufficient water to ensure thorough coverage.
- Apply after mowing **OR** allow sprayed area to dry completely before mowing.
- For control of foliar diseases, allow sprayed area to dry completely before irrigation.
- For control of soilborne diseases, PPZ AG-EC Fungicide can be watered in immediately after application.
- Under conditions that are optimum for high disease pressure, use the higher rate and shorter interval.
- For optimum turf quality and disease control, use PPZ AG-EC Fungicide in conjunction with turf management practices that promote good plant health and optimum disease control.
- Evaluate spray additives prior to use. Label directions are based on data obtained with no additives.
- Before using any fungicide, proper diagnosis of the organism causing the disease is important. Using diagnostic kits or other means of identification of the disease organism is essential to determine the best control measures.
- Do not apply more than 5.8 fluid ounces per 1000 square feet per calendar year.
- Do not apply more than 1.79 lb. propiconazole ai per acre per application.

**IMPORTANT:** Bermudagrass can be sensitive to PPZ AG-EC Fungicide.

- Do not exceed 1.44 fluid ounces per 1000 square feet every 30 days on any variety of bermudagrass.
- In Florida, do not apply PPZ AG-EC Fungicide to bermudagrass golf course greens when temperatures exceed 90 °F.
- Do not graze animals on treated areas.
- Do not feed clippings from treated areas to livestock or poultry.



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**Turfgrass - Specific Diseases, Rates and Application Timing**

Disease	fl. oz./ 1000 sq. ft.	fl. oz. /A	Application Interval/ Timing (Days)	Instructions
<b>Anthracnose</b> ( <i>Colletotricum graminicola</i> )	0.37 to 0.75	16.0 to 32.0	14 to 28	Apply when conditions favor disease development. When disease pressure is high, use a higher rate of PPZ AG-EC Fungicide and shorter interval. For broad spectrum control, tank mix with a registered contact fungicide at the label rate. If disease is present, mix 0.75 fl. oz. of PPZ AG-EC Fungicide per 1000 sq. ft. with the label rate of a registered contact fungicide.
<b>Brown patch</b> ( <i>Rhizoctonia solani</i> )			14 to 21	Begin application in May or June before disease is present. Tank mix with the label rate of a contact fungicide registered for control of brown patch. Under conditions of high temperature and humidity, use a higher rates of PPZ AG-EC Fungicide and shorter intervals.
<b>Dollar spot</b> ( <i>Sclerotinia homeocarpa</i> )	0.18	8.0	7	Apply when conditions favor disease development.
			14	Tank mix with low label rate of a contact fungicide containing chlorothalonil.
	0.37	16.0	21 to 28	Tank mix with low label rate of a contact fungicide containing chlorothalonil.
	0.37 to 0.75	16.0 to 32.0	14 to 28	If using the 0.37 to 0.75 fl. oz./1000 sq. ft. rate without tank mixing, make no more than 3 consecutive applications for control of dollar spot before rotating to an alternate EPA registered fungicide having a different mode of action.
<b>Fusarium patch</b> ( <i>Fusarium nivale</i> )	0.75 to 1.45	32.0 to 63.0	fall to early spring	Apply when conditions favor disease development.
<b>Gray leaf spot</b> ( <i>Pyricularia grisea</i> )	0.37 to 0.75	16.0 to 32.0	14	Apply when conditions favor disease development. If using the 0.37 fl. oz./1000 sq. ft. rate, tank mix with a registered contact fungicide at the label rate.

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<b>Melting out, Leaf spot</b> ( <i>Bipolaris</i> spp.) ( <i>Drechslera</i> spp.)		16.0 to 63.0		Under light to moderate pressure, apply PPZ AG-EC Fungicide to reduce the severity of leaf spot and melting. For broad spectrum disease control, tank mix the 0.37 fl. oz. PPZ AG-EC Fungicide with a registered contact fungicide at the label rate. Tank mix the 0.37 to 0.75 fl. oz./1000 sq. ft. PPZ AG-EC Fungicide rate with a registered contact fungicide at the label rate.
<b>Necrotic ring spot</b> ( <i>Leptosphaeria korrae</i> )	1.45	63.0	fall or spring	Apply in fall and/or the early spring depending upon local recommendations.
<b>Pink patch</b> ( <i>Limonomyces roseipellis</i> ) <b>Red thread</b> ( <i>Laetisaria fuciformis</i> )	0.37	32.0	14 to 21	Apply when conditions favor disease development.
<b>Powdery mildew</b> ( <i>Erysiphe graminis</i> ) <b>Rust</b> ( <i>Puccinia graminis</i> )	0.37 to 0.75	16.0 to 32.0	14 to 28	Apply when conditions favor disease development. If disease is present, use 0.75 fl. oz. of PPZ AG-EC Fungicide /1000 sq. ft.
<b>Snow mold, Gray</b> ( <i>Typhula</i> spp.) <b>Snow mold, Pink</b> ( <i>Microdochium nivale</i> )	0.75 to 1.45	32.0 to 63.0	late fall	Make 1 application in the late fall before snow cover. Do not apply on top of snow. For optimum disease control, the 0.75 and 1.1 fl. oz. PPZ AG-EC Fungicide rates should be tank mixed with chlorothalonil at label rates.
<b>Spring dead spot</b> ( <i>Leptosphaeria korrae</i> ), ( <i>Leptosphaeria narmari</i> ), <i>Ophiosphaerella herpotricha</i> ), ( <i>Gaeumannomyces graminis</i> )	1.45	63.0	30	Make 1 to 3 applications. If a single application is made, apply in September or October. For multiple applications, begin sprays in August.
<b>Stripe smut</b> ( <i>Ustilago striiformis</i> ), ( <i>Urocystis agropyri</i> )	0.37 to 0.75	16.0 to 32.0	fall or spring	Apply once in the fall after turfgrass becomes dormant or in the early spring before turfgrass starts to grow.
<b>Summer patch</b> <b>Poa patch</b> ( <i>Magnaporthe poae</i> )	0.75 1.45	32.0 63.0	14 28	Apply PPZ AG-EC Fungicide beginning in April. Use the 1.5 fl. oz./1000 sq. ft. rate on 28-day schedule and the 0.75 fl. z./1000 sq. ft. rate on a 14-day schedule.

<b>Take-all patch</b> ( <i>Gaeumannomyces graminis</i> )	0.75 to 1.45	32.0 to 63.0	spring and fall	Apply PPZ AG-EC Fungicide to reduce the severity of take-all patch. Make fall applications in September and October or when night temperatures drop below 55 °F, and spring applications in April and May, depending on local recommendations.
<b>Yellow patch</b> ( <i>Rhizoctonia cerealis</i> )	1.10 to 1.45	48.0 to 63.0	late fall	Make 1 application in the late fall before snow cover. Do not apply on top of snow. If using the 1.1 fl. oz./1 000 sq. ft. rate, tank mix with a registered contact fungicide at the label rate.
<b>Zoysia patch, large patch of zoysia</b> ( <i>Rhizoctonia solani</i> )	1.10 to 1.45	48.0 to 63.0	early fall	Make 1 application in the early fall (mid September to mid October) prior to development of disease symptoms. Consult local turfgrass extension experts to determine the optimum application timing for your area.
<b>Dichondra rust</b> ( <i>Puccinia dichondrae</i> )	0.75	32.0	14 to 21	Apply when conditions favor disease development.

**Establishment of Cool Season Turfgrass**

PPZ AG-EC Fungicide controls many turfgrass diseases; its primary use is as a fungicide for use against the diseases listed on this label. As an additional benefit, PPZ AG-EC Fungicide improves the rate of establishment when it is applied to cool season grass seedlings or sod.

**New Seedlings:** Apply 0.35 fl. oz. per 1000 sq. ft. at the 2- to 3-leaf stage of growth for faster root development and top growth.

**Sod:** Apply 0.35 fl. oz. per 1000 sq. ft. 2 to 6 weeks before cutting for increased sod knitting and faster establishment after laying.

**Ornamental Plants (Nurseries [Field] and Landscape Plantings)**

Use PPZ AG-EC Fungicide in a preventative disease control program. To determine the use directions for controlling a disease on an ornamental plant species, select the plant species in Table 1. The number(s) in parentheses following the listed plant species refers to the disease(s) controlled in Table 2. Find the disease in Table 2. The letter in brackets following the disease refers to the application regime in Table 3.

Allow spray to dry before applying overhead irrigation.

Optimum benefit of PPZ AG-EC Fungicide is obtained when used in conjunction with sound disease management practices.

**Use Recommendations**

PPZ AG-EC Fungicide may be used at rates of 0.75 to 8.7 fluid ounces per 100 gallons of water for disease control in ornamentals (see Tables 1, 2 and 3).

For best control, begin PPZ AG-EC Fungicide applications before disease development.

For general disease control in landscapes, apply 2.2 to 3.0 fluid ounces per 100 gallons water every 21 days.

For outdoor uses, you can apply up to 2.0 gallons of PPZ AG-EC Fungicide per acre per crop per calendar year.

**Use Precautions**

Plant tolerances to PPZ AG-EC Fungicide have been found acceptable for the specific genera and species of plants listed under the **Directions for Use**.

Other plant species may be sensitive to PPZ AG-EC Fungicide and diseases other than those listed may not be controlled.

Before using PPZ AG-EC Fungicide on plants or for diseases that are not listed in the **Directions for Use**, first test PPZ AG-EC Fungicide on a small scale basis.

Apply according to listed rates for a particular disease type, i.e. rust, powdery mildew, etc., and evaluate for phytotoxicity and disease control prior to widespread use.

**Use Restrictions**

Do not apply PPZ AG-EC Fungicide to African violets, begonias, Boston fern, or geraniums.

**Table 1. Ornamental Plant Species**

Number in parentheses (-) refer to diseases controlled in Table 2.

**Herbaceous Ornamentals**

calendula (4a)	English ivy (3e)	marigold (3a)	sweet william (3k)
carnation (5f)	gompfrena (3a)	monarda (4c)	( <i>Dianthus barbatus</i> )
chrysanthemum (2a)	impatiens (3a, 3b, 4a)	phlox (4c)	Zinnia (4c)
delphinium (4a)	iris (5d)	snapdragon (5d)	

**Woody Ornamentals**

amelanchier (4d)	douglas fir (5b)	maple (3e, 4f)	roses (3g, 4e, 5c)
ash (4c)	elm (4c)	oaks (3p)	(outdoor use only)
azalea (2c, 4b)	euonymus (3e, 4c)	pinus (1b, 1c)	shasta fir (5e)
bayberry (3n)	hawthorn (5a)	poplars (5b)	sweetgum (3b, 3c, 3n)
camellia (3e)	holly (3r)	pyracantha (3o)	sycamore (3e)
cotoneaster (3i)	juniper (1a)	red tip photinia (3i)	tulip tree (3e, 4a)
crabapple (3c, 3q, 4c, 5a)	lilac (4c)	rhapsiolepis (3e, 3i)	wax myrtle (3n)
crape myrtle (4a)	linden (3e, 3b, 4b)	rhododendron (2c, 3n)	
dogwood (3h, 4c)	magnolia (3e, 4b)		

**Non-Bearing Fruits and Nuts (Nurseries and Landscape Plantings)**

- apple (3q, 4d, 5a)
- barlett pear (3q, 4c, 5a)
- cherry (2b, 3d)
- citrus (3m)
- nectarine (2b)
- peach (2b)
- pecan (3b, 3c, 3f, 3l, 3n, 4e)
- plum (2b)
- walnut (3j)

**Table 2. Plant Diseases**

Letters in brackets [-] refer to application regimes in Table 3.

1. Conifer blights

- a. *Phomopsis juniperovora* (Phomopsis blight) [B]
- b. *Sirococcus strobolus* (Tip blight) [D]
- c. *Sphaeropsis sapinea* (Diplodia tip blight) [B]

2. Flower blight

- a. *Ascochyta chrysanthemi* (Ray blight) [C]
- b. *Molinia* spp. [A]

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c. *Ovulinia* spp. [B]

3. Leaf blights/spots

- a. *Alternaria* spp. [B]
- b. *Cercospora* spp. (Brown leaf spot) [C]
- c. *Cladosporium* spp. (Scab) [C]
- d. *Coccomyces hiemalis* [A]
- e. *Collectrichum* spp. [B]
- f. *Cristulariella* spp. (Zonate leaf spot) [C]
- g. *Diplocarpon rosae* (Blackspot) [B]
- h. *Discula* spp. (Anthracnose) [A]
- i. *Fabraea maculata* (syn. *Entomosporium maculata*) [B]
- j. *Gnomonia leptostyla* (Anthracnose) [C]
- k. *Heterosporium echinulatum* [B]
- l. *Mycosphaerella caryigena* (Downy spot) [C]
- m. *Mycosphaerella fructicola* (Greasy spot) [E]
- n. *Septoria* spp. (Leaf scorch) [C]
- o. *Spilocaea pyracanthae* [B]
- p. *Tubakia dryina* [D]
- q. *Venturia inaequalis* (Scab) [A]
- r. *Rhizoctonia web blight* [B]

4. Powdery mildew

- a. *Erysiphe* spp. [B]
- b. *Microsphaera* spp. [C]
- c. *Oidium* spp. [B]
- d. *Podosphaera* spp. [B]
- e. *Sphaerotheca pannosa* [B]
- f. *Phyllactinia* spp. [B]

5. Rust

- a. *Gymnosporangium juniperi-virginianae* [A]
- b. *Melampsora occidentalis* [D]
- c. *Phragmidium* spp. [B]
- d. *Puccinia* spp. [B]
- e. *Pucciniastrum goeppertianum* [D]
- f. *Uromyces dianthi* [B]

**Table 3. Application Regimes**

**[A]** Mix 0.75 to 1.5 fluid ounces of PPZ AG-EC Fungicide in 100 gallons of water and apply as a full coverage spray to the point of drip. Reapply every 14 to 21 days during the period of primary infection. If disease is present, tank mix with an EPA-registered contact fungicide. For flower blight, apply PPZ AG-EC Fungicide when there is 5 to 10% bloom and again at 70 to 100% bloom. For dogwoods, apply the 0.75 to 1.5 fluid ounces rate every 14 days, or apply 3.0 fluid ounces of PPZ AG-EC Fungicide every 28 days.

**[B]** Mix 1.8 to 3.0 fluid ounces of PPZ AG-EC Fungicide in 100 gallons of water and apply as a full coverage spray to the point of drip. Apply as needed, beginning when conditions favor disease development. For blackspot, apply in tank mix with a registered contact fungicide labeled for blackspot. For calendula, apply every 30 days. For diplodia tip blight, make a total of 3 applications every 14 days prior to the major period of infection. For juniper phomopsis blight, make an initial application as soon as junipers start to grow and reapply every 14 to 21 days



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## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup and disposal of wastes.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at [www.acrecycle.org](http://www.acrecycle.org). If not recycled, then puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

**For containers 5 gallons or less: Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**For containers greater than 5 gallons and less than 56 gallons:** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**For containers greater than 56 gallons:** To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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**For refillable containers:** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC —1-800-424-9300.**

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